REMARKS

Claims 1-8 and 21-32 are pending.

Claim 1 has been amended to recite that the hot melt adhesive is a thermoplastic hot melt adhesive. This wuld be apparent to one skilled in the art from a reading of the disclosure as a whole including the examples. Also attached is copy of the ordinary meaning of the word "thermoplastic", as set forth in The American Heritage® College Dictionary, Third Edition, 2000 (page 1407).

New claims 30-32 have been added. Support may be found in the claims as previously presented.

No new matter has been added by way of the foregoing amendment. Entry is requested.

Claims 1, 3 and 21 are rejected under 35 U.S.C 103 (a) as being unpatentable over Yang et al. (U.S. Patent No. 6,207,248).

Yang discloses reactive hot melt polyurethane adhesives. Reactive hot melts are onecomponent, 100% solids, solvent-free urethane prepolymers. Unlike conventional hot melts that
can be repeatedly heated from its solid state and flowed to a liquid form, reactive hot melts
contain isocyanate terminated prepolymers that react with surface or ambient moisture in order to
chain-extend forming a new polyurethane polymer. Reactive hot melt adhesives go through an
irreversible chemical reaction once dispensed in the presence of ambient moisture. While the
reactive hot melts of Yang may contain additives such as tackifying resins and thermoplastic
polymers, the additives are still reactive polyurethane hot melt adhesives and thus contain a
polyfunctional isocyanate component and a polymer polyol component. Claim I has been

amended to recite that the hot melt adhesive is a thermoplastic hot melt adhesive. One skilled in the art knows that a thermoplastic hot melt adhesive can be repeatedly heated from its solid state and flowed to a liquid form. With respect to claim 21 and new claims 30-32, the claim language would exclude the use of the components required by Yang. Yang does not disclose or suggest a hot melt adhesive that is not a reactive polyurethane hot melt. Applicants' claimed invention does not encompass reactive hot melts and do not contain polyurethane components.

Reconsideration and withdrawal of the rejection over Yang is requested.

Claims 2 and 22 are rejected under 35 U.S.C 103 (a) as being unpatentable over Yang et al. (U.S. Patent No. 6,207,248) in view of Milks (U.S. Patent No. 5,401,791). Claims 4, 5, 23 and 24 are rejected under 35 U.S.C 103 (a) as being unpatentable over Yang et al. (U.S. Patent No. 6,207,248) in view of Dupont et al. (U.S. Patent No. 5,325,781).

The disclosures of Milks and Dupont fail to cure the defect of Yang by suggesting a hot melt adhesive, which is not a reactive hot melt, comprising an ethylene n-butyl acrylate copolymer, a modified terpene tackifier for use in bonding difficult to bond substrates such as UV varnish treated substrates, acrylic varnish treated substrates and fluorochemical treated substrates. Reconsideration and withdraw of the rejections over Yang in view of Milks and Yang in view of Dupont is requested.

Favorable reconsideration and an early notification of allowance are solicited.

Respectfully submitted,

Cynthia L. Foulke Reg. No. 32,364

July 30, 2004

National Starch and Chemical Company P. O. Box 6500 Telephone No.: 908-685-7483 Bridgewater, New Jersey 08807-0500

THE AMERICAN HERITAGE® COLLEGE DICTIONARY

THIRD EDITION



HOUGHTON MIFFLIN COMPANY

Boston • New York

THE AMERICAN HERITAGE® COLLECE DIOMICAINDA

is the Herita famou sign, (and u forma langu

Defin ward. meani lookir the m are lis

C

Biodi mosh, mail 🗝

most :

in T Dictio vocab

with datab

EXP How r able to

ble di defini guida Herit Editic

currer ion pc ican F many scholz

noted. the E

Words are included in this Dictionary on the basis of their usage. Words that are known to have current trademark registrations are shown with an initial capital and are also identified as trademarks. No investigation has been made of common-law trademark rights in any word, because such investigation is impracticable. The inclusion of any word in this Dictionary is not, however, an expression of the Publisher's opinion as to whether or not it is subject to proprietary rights. Indeed, no definition in this Dictionary is to be regarded as affecting the validity of any trademark.

American Heritage® and the eagle logo are registered trademarks of Forbes Inc. Their use is pursuant to a license agreement with Forbes Inc.

Copyright © 2000, 1997, 1993 by Houghton Mifflin Company. All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or rettieval system without the prior written permission of Houghton Mifflin Company unless such copying is expressly permitted by federal copyright law. Address inquiries to Reference Permissions, Houghton Mifflin Company, 222 Berkeley Street, Boston MA 02116.

Library of Congress Cataloging-in-Publication Data

The American heritage college dictionary. -3rd ed.

p. cm.
ISBN 0-395-66917-0 (plain edge). —ISBN 0-395-67161-2 (thumb edge). —ISBN 0-395-66918-9 (deluxe binding).
1. English language—Dictionaries. 2. Americanisms.
PE1628.A6227 1993 92-42124 92-42124 CIP

Manufactured in the United States of America

For information about this and other Houghton Mifflin trade and reference books and multimedia products, visit The Bookstore at Houghton Mifflin on the World Wide Web at http://www.hmco.com/trade/.

PAGE 15/15 * RCVD AT 7/30/2004 2:48:37 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/0 * DNIS:8729306 * CSID:USPTO * DURATION (mm-ss):00-00/3-58

min (ther/a-min) w. Mus. An electronic instrument by Just by moving the hands near its two antennas, often used in temolo effects. [After Leo Theremin (b. 1896), Rus-

in tempto extrects. [Atter Leo Incremm (b. 1896), Rus-language and inventor.] (of this div', -6v') adv. 1. Of or concerning this, that, or the from that cause or origin; therefrom.

is the first of the first immediately, thereupon, and of the first immediately, thereupon, and of the first immediately, thereupon, and the first immediately, thereto, and of the first immediately, thereto, and of the first immediately, thereto, and of the first immediately in the first (1562).

ent atto (that too!) adv. 1. To that, this, or it. 2. Archaic. In The Bion to that; furthermore.

The Bion to that; furthermore.

The bior fore (thâr'ta-fôr', -fôr') adv. Until that time; before

un der (thûr-un dor) adv. Under this, that, or it.

the figure of (that 's pon', -pon') adv. 1. Concerning that the light upon that 2. Directly following that; forthwith 3. In

imit (thâr-with-61', -with-) adv. With that, this, or it is addition to that. 3. Archaic. Immediately thereafter.

ich Kalen formor phic (this' e-a-mor' fik) also the rivor mor-fies (-ba) adj. Thought of as having the form of a beast, of a deity. [Gk. therion, dim. of ther, wild beast; see

MOTOR + - MORITUE.] mithum s. A unit of heat equal to 100,000 British ther-Liquits. [Gk. therme, heat < thermos, warm, hot. See

abor. Thermometer. 114

(E)

mi-

: 01 Æ

OFFI TAPE

4 0

the

PITE

iء غ

æŧ

To.

ARC.

9794 5 OT

; 00

म्ब्रीत. रेख

nhgre

c/)

ęd;

علا

72

gĹ

o/.

¥.

fo

in pref. Var. of thermo-.

Jen uff. An animal having a specified kind of body com
Jenue: poikilotherm. [< Ck. therme, heat < thermos,

, bor. See gwher-".]
ps) (thur' mal) adj. 1. Of, relating to, using, producing, sued by heat. Z. Intended or designed to help retain body if -n. A tising current of warm air. — ther mal-ty ddv. and noise m. Unwanted currents or voltages in an eleccomponent resulting from the agitation of electrons by

is pollution n. Industrial discharge of heated water into in, lake, or other body of water, causing a rise in teru-

um that endangers agastic life. juk (thūr/ mik) adj. Thermal.

gui on (thúr/mi'an) n. An electrically charged particle, fail on (thúr/mi'an) n. An electrically charged particle, an electron, emitted by a conducting material at high aboutures. — therm'l-on'le (-ml-on'le) adj.

Plonic current n. A flow of thermions.

Though a mission n. Emission of thermions, esp. electrons,

a conducting material at high temperatures.

1-1-on-kes (ther/mi-on/lks) n. (used with a sing, or pl.

1-1-on-kes (thermionic phenomena.

tonic tube n. An electron tube in which the source of ens is a beared electrode.

b-tor (thur mis mr) n. A resistor made of semiconon having resistance that varies rapidly and predictably PETERIEC. (THERM(AL) + (RES)ISTOR.]

mit (thill mit, mit). A trademark used for a welding

wide that when ignited yields an intense heat.

To- or therm- pref. 1. Heat: thermochemistry. 2. Therefore: thermojunction. [< Gk. therme, heat < thermos. the hoc See graner.*.]

mochem . le try (thúr mô-kêm T-strê) n. The chemistry

in temperature gradient across the layer is abrupt.

The temperature gradient across the layer is a brupt.

The temperature gradient across the layer is a brupt.

The temperature gradient across the layer is abrupt.

The temperature gradient across the layer is abrupt.

to measure temperatures accurately, esp. one consisting of dissimilar metals joined so that a potential difference and between the points of contact is a measure of the metal difference between the points.

ing during the remember of points.

Ing during high temperatures, esp. those of pasteurization.

In the nucroorganism. [THEMMO + Lat. dirare, to last; see

grow dy name ic (thûr' mō-di-nām' lk) odi. 1. Charactering of or resulting from the conversion of heat into other than of energy. 2. Of or relating to thermodynamics.

(thút mo-di-năm lks) n. 1. (used with le. v.) The branch of physics that deals with the relationbetween hear and other forms of energy. Z. (used with

(v) Thermodynamic phenomena and processes.

no-a-leo-tric (thûr/mō-l-lēk/tdk) also ther-mo-athi-cal (-trī-kzi) adj. Characteristic of, resulting from, or selectrical phenomena occurring in conjunction with a

flow of hear - ther/mo-s-lec/tri-cal-ly adv. ther mo e lec tric-lety (thûr/mō-i-lèk-rit/l-tē, -ē/lēk-) n.
Electricity generated by a flow of heat, as in a thermocouple,
ther mo e lec-tron (thûr/mō-i-lèk/trōn') n. An electron
emitted by a material at high temperatures.

ther · mo · gram (thûr ma-gelm') a. A record made by a ther-

their mo-graph (thur' ma-gral') n. 1. A thermometer that re-cords the temperature it indicates. 2. The apparatus used in diagnostic thermography.

diagnostic thermography.

ther-mog-ra-phy (thar-mog'ra-ft) n., pl.-phles. 1. A process
for producing raised lettering, as on stationery, by application
of a powder fused by hear to the fresh ink. 2. A diagnostic
technique in which an infrared camera produces images that
reveal sites of abnormal tissue growth by measuring temperature variations on the surface of the body. — ther/mograph/ic (-mo-grdf/ik) adj. — ther/mo-graph/i-cal-ly adv.
ther-mo-june-tion (thit/mo-jungk/shan) n. The point of
contact between two dissimilar metals in a thermocouple.

ther-mo-la-bit (thit/mo-jungk/shan) surface on de-

ther mo la bile (thur mo la bil, bil) adj. Subject to destruction, decomposition, or great change by hearing. Used esp. of biochemical substances.

ther-mo-lu-mi-neg-cence (thur/mo-lob/mo-nes/ans) n. A phenomenon in which certain minerals release previously ab-

sorbed radiation upon being moderately heated.
ther-mol-y-sis (thar-mol/1-sis) n., pl. -ses (-sez'). 1. Physiol.
Dissipation of heat from the body, as by evaporation.
2. Chem. Dissociation or decomposition of compounds by hear. — ther'mo-lyt'k (thur'mo-lit'ik) adj.
ther-mom-e-ter (thor-mom'i-tor) m. An instrument for meas

ther momester (that mom's ton) n. An instrument for monuring temperature, esp. one having a graduated glass tube
with a bulb containing a liquid, such as mercury, that expands
and rises in the tube as the temperature increases.
ther momestry (thermom's tree, n. 1. Measurement of temperature. 2. The technology of temperature measurement.

—ther/mo-met/tic (thur/mo-met/tik) adj.

ther-mo-nu-cle-ar (thur/mo-met/tik) adj.

1. Of relating to, or derived from the fusion of atomic nuclei
at high temperatures: thermonuclear reactions. 2. Of, relating

at high comperatures: thermonucleur reactions. Z. Of to, or characterized by the use of atomic weppons based on fusion, esp. as distinguished from those based on fission.

maion, esc. as distinguished from mose based on fixion.
thee-mo-pe-ti-od-ism (thir'mo-pi-fe-diz'am) also there
mo-pe-ti-o-dis-ti-ty (-dis't-ti) n. The effect on an organism
of the rhythmic fluctuation of temperature, as that accompanying the alternation of day and night.
ther-mo-phile is (thir'mo-di'tk) adj. Requiring high temper-

atures for normal development, as certain bacteria. — ther/-mo-phile/ (-fil/) n.

ther ome plie (that ma-pil') n. A device consisting of a number of connected thermocouples, used for measuring temper-

ber of connected thermocouples, used for measuring temper-ature or generating current. [Thermo-+ File].]
ther mo-plas-tic (thur/mo-plas-tick) adj. Becoming soft when heated and hard when cooled. — n. A thermoplastic resin— ther/mo-plas-tic/1-ty (-plas-sis/1-te). Ther-mop y-las (ther-mop's-le). A narrow pass of E-central Greece; site of an unsuccessful Spartan stand against the Per-sians in 480 s.c.

ther mo re-cep tor (thur/mo-ri-sep tor) n. Biol. A sensory receptor that responds to heat and cold.
theremo-regeuelate (thur mo-regy uelate) intr.u.

-lat-ing. -lates. 1. To regulate body temperature. 2. To un-

dergo thermoregulation.
theremoregouslastion (thúr/mô-rěg/ya-lå/shən) n. Maintenance of a constant internal body remperature independent from the environmental temperature. — ther/mo-reg/u-lato'ry (-teg'ye-la-tur'e, -tar'e) adj.
Theremos (thur'mas). A trademark used for a brand of vac-

Ther-mos (fur mas). A redemark used for a brand of vecuum bortles and other insulated containers.

ther-mo-set-ting (thur mo-set/ing) adj. Permanently solidifying on being heated. Used of certain synthetic resiss.

ther-mo-sphere (thur mo-set/) n. The outermost shell of the
atmosphere, between the mesosphere and outer space, where

atmosphere, between the mesosphere and outer space, where temperatures increase steadily with altitude. — ther/mosspher/k (sfir/k, sfer/k) adj.
ther/mossta-ble (thur/mossta/bol) also ther/mossta-ble (bol, bil') adj. Unaffected by relatively high temperatures, as certain ferments. — ther/mossta-bll/isty (sta-bil/i-th) n.
ther/mosstat (thur/mosstat/) n.A device, as in a horse heat-

her mo stat (thir/mastat') n. A device, as m a horse heating system, that automatically responds to temperature changing and activates ewitches controlling the equipment. — that'mo stat'le adj. — ther'mo stat'l cally adv.
her mo tax-le (thur'mastak's!) n., pl. -tax as (-tak'sex).

1. Movement of a living organism in response to temperature
thanges. 2. Normal regulation or adjustment of body temperature. — ther'mo-tac'tic (-tak'tik), ther'mo-tax'ic (-rik/sik) adj.

(-tak'sik) ad.

ther * mort * ro * pism (ther-mot' ro * piz'zm) n. Biol. The undercy of plane or other organisms to bend roward or away from heat. — ther mo trop' ic (thur mortop' ik) ad.

thermy suff. Heat: diathermy, [NLat. * - thermia < Gk. thermö, beat < thermos, warm, hot. See g'her-*.]

the *ro * pod (thir' > -pôd') n. Any of various cataivorous dino-

theremin theropod

oi boy 4 DEV OU OUT ðó töðk ä father 65 boot č pet č be ă cut ûr urge th thin l pit ple ch this hw which zh vision tr pler â toe Juoda e 5 caw

Stress marks: / (primary) ' (secondary), as in dictionary (dik'sha-nër'ë)



٠:,

eri ke